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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/850,202	05/07/2001	Peter Phaal	21906-0703	9730

7590 08/24/2004

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EXAMINER

LIEN, TAN

ART UNIT PAPER NUMBER

2141

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/850,202

Applicant(s)

PHAAL, PETER

Examiner

Tan Lien

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 07 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/6/01.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTIONS

### *Drawings*

The drawings of Figure 3 are objected to because the reference numbers not pointing to any particular entity. For example, 300 and 310 are not referencing any elements of the monitoring system.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruins et al (US Patent 6,308,148) in view of Merriam (US Patent 6,587,878).

Claim(s) 1, 10: Bruins teaches a method to monitor a network by a network monitor, comprising:

routing data packets through a router (col. 2, lines 20-21; wherein the function of a router is to route data packets through its interfaces);

generating flow records for at least some of said data packets (col. 2, lines 23-24; wherein the router is collecting or generating flow information to be used);

filtering said at least some of the flow records (col. 2, lines 36-40); and

extracting packet information from the filtered flow records (col. 3, lines 66-67), wherein the extracted packet information comprises internet information of at least one target of interest (col. 4, lines 9-17; wherein the target of interest is the selected range of source addresses that originate from the internet domain "cisco.com" or in the second case, the target of interest is the selected protocol type such as the "FTP" protocol).

Bruins, however, fails to teach performing active measurements to said target of interest using the extracted packet information.

Marriam, in an analogous art, teaches a performance measurement program to measure actual performance data from/to target, downloaded web pages (col. 5, lines 29-31 and col. 9, lines 45-50).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine and use Bruins' method of extracting packet information from the filtered flow records with Marriam's performance measurement program to measure actual performance data extracted from the filter. The reason why Bruins would want to combine is because Bruins would want to use Marriam's performance measurement result to adjust the parameters of the network to

make the network perform more efficiently (Abstract of Bruins, next to last sentence).

Claim(s) 2, 11: Bruins and Marriam teach the method according to claim 1, said filtering step comprising:

selecting flow records based on an address field of said flow records (col. 2, lines 24-25 Bruins).

Claim(s) 3, 4, 12, 13: Bruins and Marriam teach the method according to claim 2, said filtering step comprising

selecting flow records having destination or source of non-local hosts (col. 3, lines 21-23 Bruins; wherein the destination are host from the "internet" which implies non-local and local hosts. It is well known in the art that a method can filter flow records that have source and/or destination host from a local subnet or other subnets).

Claim(s) 5, 14: Bruins and Marriam teach the method according to claim 5, said filtering step comprising:

selecting flow records containing critical services based on the address field or a port field of the records (col. 2, lines 28-32 and col. 3, lines 25-39 Bruins).

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Claim(s) 6, 15: Bruins and Marriam teach the method according to claim 1, said filtering step comprising:

randomly selecting data packets from said filtered data packets (col. 2, lines 36-38; wherein each filter randomly selects only a subset of the total flows).

Claim(s) 7, 8, 16, 17: Bruins and Marriam teach the method according to claim 1, said active measurement comprise a ping and a traceroute process (Official Notice is taken of active measurement comprise ping and traceroute process. It is well known in the art at the time of the invention to use these processes in active measurement of network performance).

Claim(s) 9, 18: Bruins and Marriam teach the method according to claim 1, wherein said active measurements are selected based on said target of interest (col. 5, lines 29-31 and col. 9, lines 45-50 and FIG. 1, ref. Server probe and remote probes of Marriam).

Claim(s) 19: Bruins and Marriam teach a method to monitor a network by a network monitor, comprising:

routing data packets through a router (col. 2, lines 20-21; wherein the function of a router is to route data packets through its interfaces);

generating flow records for at least a fraction of said data packets (col. 2, lines 23-24 and col. 2, lines 38-39; wherein the router is collecting or generating flow information to be used and the filters select only a subset or fraction of the flows or filtered data packets);

extracting packet information from at least a fraction of said flow records (col. 3, lines 66-67), wherein the extracted packet information comprises internet information of at least one target of interest (col. 4, lines 9-17; wherein the target of interest is the selected range of source addresses that originate from the internet domain "cisco.com" or in the second case, the target of interest is the selected protocol type such as the "FTP" protocol); and

performing active measurements to said target of interest using the extracted packet information.

Bruins, however, fails to teach performing active measurements to said target of interest using the extracted packet information.

Marriam, in an analogous art, teaches a performance measurement program to measure actual performance data from/to target, downloaded web pages (col. 5, lines 29-31 and col. 9, lines 45-50).



It would have been obvious to one of ordinary skill in the art at the time of the invention to combine and use Bruins' method of extracting packet information from the filtered flow records with Marriam's performance measurement program to measure actual performance data extracted from the filter. The reason why Bruins would want to combine is because Bruins would want to use Marriam's performance measurement result to adjust the parameters of the network to make the network perform more efficiently (Abstract of Bruins, next to last sentence).

Claim(s) 20: Bruins and Marriam teach the method of claim 19, said generating step comprising:

filtering said data packets (col. 2, lines 36-40 Bruins); and  
creating flows records for said filtered data packets (col. 2, lines 23-34 Bruins).

Claim(s) 21: Bruins and Marriam teach the method of claim 20, said extracting step comprising:

sampling said generated flow records (col. 2, line 38 Bruins); and  
obtaining packet information from said sampled flow records (col. 2, lines 25-26 Bruins).

Claim(s) 22: Bruins and Marriam teach the method of claim 20, said filtering step comprising:

selecting flow records based on an address field of said flow records (col. 2, lines 24-25 Bruins).

Claim(s) 23, 24: Bruins and Marriam teach the method of claim 20, said filtering step comprising

selecting flow records and/or data packets having destination or source of non-local or local hosts (col. 3, lines 21-23 Bruins; wherein the destination are host from the "internet" which implies non-local and local hosts. It is well known in the art that a method can filter flow records and/or data packets that have source and/or destination host from a local subnet or other subnets).

Claim(s) 25: Bruins and Marriam teach the method of claim 20, said filtering step comprising

selecting flow records containing critical services based on the address field or a port field of the flow records (col. 2, lines 28-32 and col. 3, lines 25-39 Bruins).

Claim(s) 26, 27: Bruins and Marriam teach the method according to claim 19, wherein said active measurements comprise a ping and a traceroute process (Official Notice is taken of active measurement comprise ping and traceroute process. It is well known in the art at the time of the invention to use these processes in active measurement of network performance).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Tan Lien whose telephone number is (703) 305-6018. The examiner can normally be reached on Monday-Thursday from 8:30am to 6pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia, can be reached at (703) 305-4003. The fax phone number for this Group is (703) 305-3718.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [tan.lien@uspto.gov].

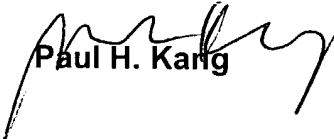
All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

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**Tan Lien**

  
Paul H. Kang

**Examiner**

**Primary Examiner**